PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Tchao, R.	Examiner: Wong, L. (Anticipated)
Serial No.: 09/472,490	Group Art Unit: 1302 (Anticipated)
Filed: December 23, 1999	Docket: 102-302 RES/CON
For: Chemotaxis Assay	Dated: June 11, 2008

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PETITION TO WITHDRAW HOLDING OF ABANDONMENT BASED ON FAILURE TO RECEIVE OFFICE ACTION UNDER 37 CFR 1.181(a)

Sirs:

The PTO has issued a "Notice of Abandonment" on May 12, 2008 in the above-identified application. Such Notice was issued in error, as discussed below. Accordingly, Applicants request a withdrawal of the holding of abandonment.

The Notice of Abandonment **(Exhibit A)** states that the application was abandoned in view of: "[t]he decision by the board of Patent Appeals and Interference rendered on 28 January 2008 and because the period for seeking court review of the decision has expired and there are no allowed claims".

The decision by the board of Patent Appeals and Interference dated January 28, 2008 **(Exhibit B)** ordered that the decision of the Examiner rejecting claims 46-48, 50 based on 35 USC §112, first paragraph, and based on 35 USC §251 rejection be REVERSED.

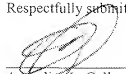
Additionally, the Board ordered that the decision by the Examiner rejecting claims 46-50 based on a judicially created doctrine of obviousness patenting, and based on a defective reissue oath/declaration be AFFIRMED. Furthermore, the Board "ordered that the case be returned to the Examiner for action consistent herewith."

However, the Examiner failed to issue and action consistent with the Board's decision. In fact, the Examiner only issued a Notice of Abandonment. Thus, the Applicant petitions to withdraw holding of Abandonment based on the failure to receive an office action consistent with the Board of Patent Appeals decision.

Furthermore, to advance prosecution, enclosed herewith is a terminal disclaimer **(Exhibit C)** in response to the rejection under the judicially created doctrine of obviousness patenting over claims 1-19 of RE38,383 E. Additionally, enclosed herewith is a Supplemental Reissue Declaration **(Exhibit D)** to overcome the rejecting based on a defective reissue oath/declaration. Thus, in view of the decision by the Board of Patent Appeals and the enclosed submissions, the application is believed to be in condition for allowance.

Applicants believe no fee is required to file this Petition (MPEP 711.03(c)). If there are any questions regarding this response, the Applicants' undersigned attorney at the telephone number provided below should be contacted as soon as possible.

Respectfully submitted,



Anna-Lisa L. Gallo, Esq.
Registration No.: 50,279
Attorney for Applicant(s)

HOFFMANN & BARON, LLP
6900 Jericho Turnpike
Syosset, New York 11791
(973) 331-1700

Encl.: Notice of Abandonment (Exhibit A)
Decision on Appeal (Exhibit B)
Terminal Disclaimer (Exhibit C)
Supplemental Reissue Declaration (Exhibit D)

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO
09/472,490	12/23/1999	RUY TCHAO	102-302RE/CO	8828

23869 7590 05/12/2008

HOFFMANN & BARON, LLP
6900 JERICHO TURNPIKE
SYOSSET, NY 11791

MAY 14 2008

EXAMINER	
WONG, LESLIE A	
ART UNIT	PAPER NUMBER
1794	
MAIL DATE	DELIVERY MODE
05/12/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

RECEIVED
MAY 16 2008
HOFFMANN & BARON, NJ

EXHIBIT A

Notice of Abandonment	Application No.	Applicant(s)
	09/472,490	TCHAO, RUY
	Examiner	Art Unit
	Leslie Wong	1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

This application is abandoned in view of:

1. ☐ Applicant's failure to timely file a proper reply to the Office letter mailed on _____.
   (a) ☐ A reply was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply (including a total extension of time of _____ month(s)) which expired on _____.
   (b) ☐ A proposed reply was received on _____, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.
   (A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
   (c) ☐ A reply was received on _____ but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111 (See explanation in box 7 below).
   (d) ☐ No reply has been received.

2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
   (a) ☐ The issue fee and publication fee, if applicable, was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
   (b) ☐ The submitted fee of $_____ is insufficient. A balance of $_____ is due.
   The issue fee required by 37 CFR 1.18 is $_____. The publication fee, if required by 37 CFR 1.18(d), is $_____.
   (c) ☐ The issue fee and publication fee, if applicable, has not been received.

3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
   (a) ☐ Proposed corrected drawings were received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply.
   (b) ☐ No corrected drawings have been received.

4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.

5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.

6. ☒ The decision by the Board of Patent Appeals and Interference rendered on *28 January 2008* and because the period for seeking court review of the decision has expired and there are no allowed claims.

7. ☐ The reason(s) below:

/Leslie Wong/
Primary Examiner, Art Unit 1794

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.

DICK
102-0715

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/472,490	12/23/1999	RUY TCHAO	102-302RE/CO	8828

23869 7590 01/28/2008

HOFFMANN & BARON, LLP
6900 JERICHO TURNPIKE
SYOSSET, NY 11791

EXAMINER	
WONG, LESLIE A	

ART UNIT	PAPER NUMBER
1794	

MAIL DATE	DELIVERY MODE
01/28/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

EXHIBIT B

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RUY TCHAO

Appeal 2007-4229
Application 09/472,490[1]
Patent 5,601,997
Technology Center 1700

Decided: January 28, 2008

Before TEDDY S. GRON, ADRIENE LEPIANE HANLON, and CAROL A. SPIEGEL, *Administrative Patent Judges.*

SPIEGEL, *Administrative Patent Judge.*

DECISION ON APPEAL

INTRODUCTION

[1] Application 09/472,490, filed 23 December 1999, is said to be a continuation of Application 09/159,427, filed 23 September 1998, as a reissue of Patent 5,601,997 ("the '997 patent"), which issued 11 February 1997, based on Application 08/383,058, filed 3 February 1995. The real party-in-interest is said to be Ruy Tchao (APPEAL BRIEF PURSUANT TO 37 C.F.R. §41.37 IN RESPONSE TO NOTICE OF NON-COMPLIANT BRIEF, filed 8 December 2006 ("App. Br.") at 3).

Ruy Tchao ("Appellant") appeals under 35 U.S.C. § 134 from the Examiner's final rejection of claims 46-50, all of the pending claims. Claim 49 is also objected to as being dependent upon a rejected base claim (Ans.[2] 5). We have jurisdiction under 35 U.S.C. § 6(b). We AFFIRM.

SUBJECT MATTER ON APPEAL

The claims on appeal are directed to a cell migration assay comprising measuring the movement of cells across a radiation opaque membrane, wherein the assay does not destroy the cells being measured. Claim 46, the sole independent claim, is illustrative and reads (App. Br. 18):

> A cell migration assay procedure comprising measuring the migration of cells across a radiation opaque membrane wherein said procedure is non-destructive of said cells.

THE REJECTIONS

Claims 46-50 stand rejected for obviousness-type double patenting of claims 1-19 of US Patent RE38,863 E.[3] "This rejection is not being appealed as, if the claims are otherwise found to be allowable, an appropriate terminal disclaimer will be filed" by Appellant (App. Br. 4; see also App. Br. 16). Therefore, we AFFIRM the rejection of claims 46-50 for obviousness-type double patenting of claims 1-19 of RE38,863 E since a proper terminal disclaimer has not yet been filed by Appellant.

---

[2] Examiner's Answer mailed 23 February 2007 ("Ans.").

[3] According to the Examiner, claims 46-50 stand "provisionally rejected under the judicially created doctrine of obviousness-type double patenting ...over claims 1-15 and 38-41 of copending Application No. 09/966,831" (Ans. 4). Application No. 09/966,831 issued as reissue patent US RE38,863 E on 1 November 2005. Thus, this is no longer a provisional rejection.

Claims 46-50 stand rejected under 35 U.S.C. § 251 as based on a defective declaration (Ans. 4). "This rejection is also not being appealed as, if the claims are found to be otherwise allowable, an appropriate supplemental oath/declaration pursuant to 37 C.F.R. § 1.75(b)(1) will be filed" by Appellant (App. Br. 4; see also App. Br. 16). Therefore, we AFFIRM the rejection of claims 46-50 under § 251 as based on a defective reissue oath/declaration since a proper oath/declaration has not yet been filed by Appellant.

Claims 46-48 and 50 stand rejected under 35 U.S.C. § 112, first paragraph, as not enabled throughout their full scope (Ans. 5); and, under 35 U.S.C. § 251 as improperly broadening the scope of the claims of the '997 patent (Ans. 6). We discuss these last two rejections below.

FINDINGS OF FACT

The following findings of fact ("FF") are supported by a preponderance of the evidence of record.

[1] Originally issued claim 15 of the '997 patent reads, "A chemotaxis assay procedure comprising measuring the migration of cells across a radiation opaque membrane, wherein said procedure is non-destructive of said cells" (emphasis added).

[2] Claim 46 of the reissue application on appeal differs from originally issued claim 15 of the '997 patent only in its preamble, which recites "A cell migration assay procedure."

[3] According to the '997 patent,[4] such radiation opaque

> membranes permit the measurement of radiation emitted from labeled cells that have migrated

[4] We cite the '997 patent in lieu of the reissue application on appeal.

> through the radiation opaque membrane without interference from radiation emitted from the labeled cells that have not migrated, without the need to remove the non-migrated cells from the radiation opaque membrane. This is a significant advantage of the present invention over the prior art procedures, not only because it avoids the tedious steps of removing the filter, and scraping the non-migrated cells from the filter, but also because it is non-destructive of the cell sample and thus permits repeated measurements of the same test sample at different time intervals. ['997 patent 5:62 through 6:9.]

[4] In one embodiment, the '997 patent describes using a radiation opaque porous membrane to separate a well into two chambers, placing labeled cells into one chamber and a chemical agent into the other. Chemotaxis is said to cause labeled cells to migrate through the membrane into the other chamber in response to the chemical agent, wherein the amount of label on that side of the membrane, and thus the amount of migrated cells, can be measured at predetermined intervals ('997 patent 3:42 through 4:38).

[5] The '997 patent defines chemotaxis as "the orientation or movement of an organism or cell in relation to a chemical agent" ('997 patent 1:14-15).

[6] Both Appellant and the Examiner acknowledge that chemotaxis is but one method known for use in effecting cell migration (App. Br. 9; Ans. 5-6).

[7] According to the Examiner, the disclosure of the '997 patent is limited to non-destructive chemotaxis assays because it does not disclose cell migration in response to any other stimulus (Ans. 5-6).

[8] Further according to the Examiner, it would require "extensive experimentation" to use other methods of inducing cell migration, such as phototaxis, electrotaxis, or geotaxis, in response to an agent other than a chemical agent (Ans. 6).[5]

[9] The Examiner concludes that the reissue claims have improperly broadened the scope of the originally issued claims because "Appellant does not teach any and all types of non-destructive assays or any and all types of inducing agents" (Ans. 6).

[10] Appellant argues that the operative assay measurement is cell migration and chemotaxis is only one technique known to induce cell migration (App. Br. 9-10).

[11] In other words, Appellant argues that use of a radiation opaque membrane as recited in claim 46 is independent of the particular stimulant causing the cells to migrate therethrough (App. Br. 10).

[12] According to Appellant, so long as the membrane used in the assays has the properties described in the specification, no undue experimentation would have been necessary to practice the claimed steps in any cell migration assay (App. Br. 13).

[13] Thus, Appellant submits that the originally filed application describes and enables a non-destructive cell migration assay

[5] Taxis is the response of a cell or an organism to a directional (attractive or repulsive) stimulus. For example, the stimuli for chemotaxis, geotaxis, electrotaxis and phototaxis are a chemical, gravity, electric current and light, respectively.

procedure as recited in the appealed claims and that the requirements of § 251 have been satisfied (App. Br. 15).

DISCUSSION

A. Enablement

"When rejecting a claim under the enablement requirement of section 112, the PTO bears an initial burden of setting forth a reasonable explanation as to why it believes that the scope of protection provided by that claim is not adequately enabled by the description of the invention provided in the specification of the application. . .". *In re Wright*, 999 F.2d 1557, 1561-62 (Fed. Cir. 1993). "That some experimentation is necessary does not constitute a lack of enablement; the amount of experimentation, however, must not be unduly extensive." *Amgen, Inc. v. Chugai Pharmaceutical Co., Ltd.*, 927 F.2d 1200, 1212 (Fed. Cir. 1991). "Whether undue experimentation is needed is not a single, simple factual determination, but rather is a conclusion reached by weighing many factual considerations." *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988). A number of factors are relevant to whether undue experimentation would have been required to practice the claimed invention, including "(1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims." *Id.*, 858 F.2d at 737.

According to the Examiner, "extensive experimentation" would have been required to enable the full scope of the claims 46-48 and 50

because the '997 patent specification only discloses cell migration in response to a chemical stimulus (FFs 7-8). The Examiner did not characterize the extent of experimentation as undue. The Examiner did not provide a sufficient factual basis for concluding that undue experimentation would have been required, e.g., that a person of ordinary skill in the art, using the knowledge available to such a person and the disclosure of the '997 patent specification, could not have made and used the claimed invention. "Nothing more than objective enablement is required, and therefore it is irrelevant whether this teaching [of how to make and use the full scope of the claimed invention] is provided through broad terminology or illustrative examples." *In re Wright*, 999 F.2d at 1561 (Fed. Cir. 1993).

Therefore, we REVERSE the Examiner's rejection of claims 46-48 and 50 under § 112, first paragraph, for lack of enablement.

B. Broadening reissue claims

"Section 251 allows patentees to correct 'errors' made during prosecution, such as claiming less than the patentee had a right to claim." *In re Clement*, 131 F.3d 1464, 1468 (Fed. Cir. 1997). In essence, the position of the Examiner is that Appellant has no right to the subject matter of reissue claims 46-48 and 50 because the '997 patent specification would not have enabled the full scope of these claims. Since the Examiner has failed to establish that the disclosure of the '997 patent specification would not have enabled the full scope of reissue claims 46-48 and 50, we also REVERSE the Examiner's rejection of claims 46-48 and 50 under § 251.

ORDER

Upon consideration of the record and for the reasons given, it is

ORDERED that the decision of the Examiner rejecting claims 46-50 under the judicially created doctrine of obviousness patenting over claims 1-19 of RE38,383 E is AFFIRMED;

FURTHER ORDERED that the decision of the Examiner rejecting claims 46-50 under 35 U.S.C. § 251 as based on a defective reissue oath/declaration is AFFIRMED;

FURTHER ORDERED that the decision of the Examiner rejecting claims 46-48 and 50 under 35 U.S.C. § 112, first paragraph, for lack of enablement is REVERSED;

FURTHER ORDERED that the decision of the Examiner rejecting claims 46-48 and 50 under 35 U.S.C. § 251 as improperly broadening the scope of the claims of Patent 5,601,997 is REVERSED; and,

FURTHER ORDERED that the case be returned to the Examiner for action consistent herewith.

AFFIRMED

MAT

HOFFMAN & BARON, LLP
6900 Jericho Turnpike
Syosset, New York 11791

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application for Reissue of U.S. Patent No. 5,601,997

Applicant(s): Tchao, R.	Examiner: Wong, L. (Anticipated)
Serial No.: 09/472,490	Group Art Unit: 1302 (Anticipated)
Filed: December 23, 1999	Docket: 102-302 RES/CON
For: Chemotaxis Assay	Dated:

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT(S)

The owner, Ruy Tchao, of 100 percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term **prior patent** No(s). RE 38,863 as the term of said prior patent is defined in 35 U.S.C. 154 and 173, and as the term of said prior patent is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the **prior patent** are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. 154 and 173 of the prior patent, "as the term of said **prior patent** is presently shortened by any terminal disclaimer," in the event that said **prior patent** later:

expires for failure to pay a maintenance fee;
is held unenforceable;
is found invalid by a court of competent jurisdiction;
is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321;
has all claims canceled by a reexamination certificate;
is reissued; or

EXHIBIT C

is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

Check either box 1 or 2 below, if appropriate.

1. ☐ For submissions on behalf of a business/organization (e.g., corporation, partnership, university, government agency, etc.), the undersigned is empowered to act on behalf of the business/organization.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

2. ☒ The undersigned is an attorney or agent of record. Reg. No. 50,279

Signature — Date: 6-11-08

Anna-lisa L. Gallo
Typed or printed name

(973) 331-1700
Telephone Number

☒ Terminal disclaimer fee under 37 CFR 1.20(d) included.

☒ PTO suggested wording for terminal disclaimer was unchanged.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

* Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner). Form PTO/SB/96 may be used for making this certification. See MPEP § 324.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application for Reissue of U.S. Patent No. 5,601,997

Applicant(s): Tchao, R.	Examiner: Wong, L. (Anticipated)
Serial No.: 09/472,490	Group Art Unit: 1302 (Anticipated)
Filed: December 23, 1999	Docket: 102-302 RES/CON
For: Chemotaxis Assay	Dated:

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

SUPPLEMENTAL REISSUE DECLARATION

Sir:

I, Ruy Tchao, declare that I am a citizen of the United States and a resident of Flourtown, Pennsylvania, and:

that I believe that I am the original and first sole inventor of the subject matter claimed in U.S. Patent No. 5,601,997 (hereinafter the '997 patent), entitled "Chemotaxis Assay Procedure";

that I have reviewed and understand the specification of the accompanying reissue application, including the claims;

that I believe that I am the original and first sole inventor of the subject matter which is claimed and for which a reissue patent is sought; and

that I acknowledge my duty to disclose to the U.S. Patent Office all information known to me to be material to patentability as defined in 37 C.F.R. §1.56.

EXHIBIT D

Every error in the '997 patent which was corrected in the present reissue application which was and is not covered by a prior oath/declaration submitted in this application arose without any deceptive intent on the part of the applicant.

I declare that all statements made herein of my own knowledge are true, and that all statements made upon information and belief are believed to be true, and further that these statements were made after being warned that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001, and that such false statements may jeopardize the validity of this application or any patent issuing thereon.

Full name of sole or first inventor Ruy Tchao, Ph.D.

Inventor's Signature Ruy Tchao Date June 6, 2008

Residence 404 Cedar Lane, Flourtown, PA 19031 Citizenship U.S.A.

Post Office Address Flourtown PA 19031